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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,633

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Yoshiharu Tanaka

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EXAMINER

NEGRON, ISMAEL

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/813,633	TANAKA ET AL.	
	Examiner	Art Unit	
	Ismael Negroni	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-27 is/are rejected.
- 7) ☒ Claim(s) 25 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on August 31, 2006 has been entered. Claims 5, 7 and 14 have been amended. Claims 1-4 have been cancelled. Claims 24-27 have been added. Claims 5-27 are still pending in this application, with claims 5, 14 and 26 being independent.

Claim Objections

2. Claim 25 is objected to because of the following informalities: line 3 should read "*an emission point of the ~~at least one~~ LED is located at a middle of the thickness of the*".
3. Claim 27 is objected to because of the following informalities: line 4 should read "*an emission point of the ~~at least one~~ LED is located at a middle of the thickness of the*".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-13 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of SOMMERS (U.S. Pat. 6,674,096).
5. MISHIMAGI discloses a vehicle rear view mirror having:
- **a housing (as recited in claims 5 and 26),** Figure 3, reference number 22;
 - **a mirror (as recited in claims 5 and 26),** Figure 3, reference number 18;
 - **the mirror being disposed on the back side of the housing (as recited in claims 5 and 26),** as seen in Figure 3;
 - **one LED (as recited in claims 5 and 26),** Figure 3, reference number 27;
 - **the LED including a light emitting element (as recited in claims 5 and 26),** inherent;
 - **a light guiding member (as recited in claims 5 and 26),** Figure 1, reference number 26;
 - **the housing having an opening formed at part of its outer surface (as recited in claims 5 and 26),** Figure 2, reference number 22b;

- **the light guiding member being attached to the housing and exposed in the opening (as recited in claims 5 and 26), column 6, line 66 to column 7, line 1;**
- **the LED being housed by the light guiding member at a predetermined position (as recited in claims 5 and 26), as seen in Figure 1;**
- **the light-guiding member allowing light plane-radiated from the LED to be transmitted through and to be reflected on its inner surface to be radiated in a desired direction (as recited in claims 5 and 26), column 7, lines 40-49;**
- **the light guiding member having a front face formed along the outer shape of the housing (as recited in claim 6), inherent, as seen in Figure 1;**
- **the light guiding member having a back face opposite to the front face (as recited in claim 6), inherent, as seen in Figure 1;**
- **the back face being provided with a step portion to diffuse light radiated from the LED (as recited in claim 6), as seen in Figure 1;**
- **the step portion functioning as a reflection surface that reflects light radiated from the LED or light reflected on**

at least part of the front face and back face of the light guiding member in a desired direction to allow the light to be externally radiated from the front face the light guiding member (as recited in claim 7), column 7, lines 28-34;

- **the at least one LED being disposed between the front face and back face of the light guiding member (as recited in claim 8), as evidenced by Figure 1;**
- **the at least one LED being disposed near the outer edge of the housing (as recited in claim 8), as seen in Figure 1;**
- **the light guiding member having a V-shaped notch on the back face (as recited in claim 9), Figure 1, reference number 26c;**
- **the notch serving to diffuse light radiated from the LED (as recited in claim 9), column 7, lines 40-49;**
- **the light guiding member having one end that is extended near the mirror on the back side of the housing (as recited in claim 10), as seen in Figure 1;**
- **the housing being attached to a door or an engine hood of the vehicle, or to a motorcycle as the vehicle (as recited in claim 11), as seen in Figure 4;**

- **the LED being turned on in conjunction with a blinker lamp and/or parking lamp (as recited in claim 13), column 8, lines 26-37;**
- **the LED being fitted into the light guiding member (as recited in claims 24 and 27), as seen in Figure 1;**
- **the light guiding member having a thickness (as recited in claims 25 and 27), inherent, as any three-dimensional entity has a thickness; and**
- **an emission point of the LED being located at a middle of the thickness of the light guiding member (as recited in claims 25 and 27), as evidenced by Figure 1.**

6. MISHIMAGI discloses all the limitations of the claims, except:

- the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element (as recited in claims 5 and 26);
- the LED emitting amber or white light (as recited in claim 12).

7. SOMMERS discloses an illumination device having:

- **an LED (as recited in Claim 5), Figure 2, reference number 10;**

- **the LED including a light emitting element (as recited in Claim 5), Figure 2, reference number 12;**
- **the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element (as recited in claim 5), as seen in Figure 2; and**
- **the LED having a wide range of available emission colors, such as white or amber, column 1, lines 23-26.**

8. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the patented LED illumination device of SOMMERS as the LED of the vehicle rearview mirror of MISHIMAGI, to simplify such rear view mirror structure by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1) and to increase the efficiency of the coupling between the LED and the light guiding member, as per the teachings of SOMMERS.

9. Regarding the LED emitting amber or white light (as recited in claim 12), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use amber LED for signaling an intended turn direction of the vehicle, as suggested by MISHIMAGI (column 8, lines 26-37), as the use of such color is not only old and well known in the art, but standard for such direction indicator lamps.

10. Claims 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of YAN (U.S. Pat. 5,865,529).

11. MISHIMAGI discloses a vehicle rear view mirror having:

- **a housing (as recited in claim 14), Figure 3, reference number 22;**
- **a mirror (as recited in claim 14), Figure 3, reference number 18;**
- **the mirror being disposed on the back side of the housing (as recited in claim 14), as seen in Figure 3;**
- **at least one LED (as recited in claim 14), Figure 3, reference number 27;**
- **the LED including a light emitting element (as recited in claim 14), inherent;**
- **the LED radiating light in the optical axis direction of the light emitting element (as recited in Claim 14), as seen in Figure 1;**
- **a reflector (as recited in Claim 14), Figure 1, reference number 23;**
- **the reflector being disposed along the shape of the housing at part of the outer surface of the housing (as recited in Claim 14), as seen in Figure 1;**

- **the reflector having at least one reflection surface which allows light plane-radiated from the LED disposed in the reflection surface to be reflected in the front or side direction of the vehicle (as recited in Claim 14), as seen in Figure 1;**
- **the reflector has two reflection surfaces for forward lighting and for sideward lighting (as recited in Claim 15), as seen in Figure 1;**
- **the reflector having a diffusion surface to diffuse incident light on its inner surface, column 7, lines 28-34;**
- **the housing being attached to a door or an engine hood of the vehicle, or to a motorcycle as the vehicle (as recited in Claim 19), as seen in Figure 4;**
- **the LED is turned on in conjunction with a blinker lamp and/or parking lamp (as recited in Claim 21), column 8, lines 26-37;**
- **the LED being disposed inside the housing such that light radiated from the light emitting element is directly radiated to the back of the vehicle (as recited in Claim 22), as evidenced by Figure 1; and**
- **the reflector having a partially reduced thickness such that light radiated from the light emitting element is**

directly radiated to the back of the vehicle (as recited in Claim 23), as seen in Figure 1.

12. MISHIMAGI (U.S. Pat. 6,769,798) discloses all the limitation of the claims, except:

- the LED radiating light in a direction nearly vertical to the optical axis direction (as recited in Claim 14);
- the reflector having a cover on its front face (as recited in Claim 16);
- the cover having a diffusion surface to diffuse incident light on its inner surface (as recited in Claim 17);
- the cover being transparent or semi-transparent (as recited in Claim 18);
- the cover being colored in amber or colorless (as recited in Claim 18);
- the LED emitting amber or white light (as recited in Claim 20).

13. YAN discloses an illumination device having:

- **an LED (as recited in Claim 14), Figure 6, reference number 14;**
- **the LED including a light emitting element (as recited in Claim 14), Figure 6, reference number 140;**

- **the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element (as recited in claim 14), as seen in Figure 6; and**
- **the LED having a wide range of available emission colors, such as white or amber, column 3, lines 49-51.**

14. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the patented LED illumination device of YAN as the LED of the vehicle rearview mirror of MISHIMAGI, to simplify such rear view mirror structure by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1) and to increase the efficiency of the coupling between the LED and the light guiding member, as per the teachings of YAN.

15. Regarding the cover, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include a cover in the patented vehicle rear view mirror of MISHIMAGI to protect the reflector from scratches and contaminants.

16. Regarding the cover being transparent or semi-transparent, colored in amber or colorless (as recited in Claim 18), or the LED emitting amber or white light (as recited in Claim 20), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made for the vehicle rear view mirror of MISHIMAGI and YAN to use the color amber for signaling an intended turn direction of the vehicle, as suggested by MISHIMAGI (column 8, lines 26-37), as the use of such color is not only old and well known in the art, but standard for such direction indicator lamps.

Response to Arguments

17. Applicant's arguments filed August 31, 2006 have been fully considered but they are not persuasive.

18. Regarding the Examiner's rejection of Claim 5 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of SOMMERS (U.S. Pat. 6,674,096), the applicant argues that the cited combination references fail to individually disclose, or even suggest when combined, all the features of the claimed invention, specifically MISHIMAGI not disclosing a light guiding member that houses the LED. The applicant further argues that there is no motivation in the Prior Art to combine the cited references. The applicant even further argues that combining the cited references as proposed by the Examiner would require substantial structural modification of the patented structure of MISHIMAGI.

19. Regarding the Examiner's rejection of claims 6-13, 24 and 25 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of SOMMERS (U.S. Pat. 6,674,096), the applicant present no arguments, except stating that such claims depend directly or indirectly from independent Claim 5 and would be allowable when/if the independent claim is allowed.

20. In response to applicant's arguments that MISHIMAGI failed to disclose individually, or suggest in combination, a light guiding member that houses the LED the

applicant is respectfully advised that while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 70 USPQ2d 1827 (Fed. Cir. May 13, 2004).

In this case, MISHIMAGI discloses a vehicle rearview mirror assembly including a housing 22 and a mirror 18 disposed on the backside of the housing 22. The mirror assembly further include a lamp assembly 23 having light guiding member 26 with a plurality of LED 27 positioned within a void defined by the light guiding member 23. See Figure 1 and 3 of MISHIMAGI.

At least one of the LED in the patented structure of MISHIMAGI is clearly shown (see Figure 1) as located within the void of the light guiding member and as such was broadly considered to be housed by the light guiding member.

21. In response to applicant's argument that the teachings of MISHIMAGI and SOMMERS provide no suggestion to combine, the applicant is advised that suggestion or motivation to modify a prior art structure can be found in a reference, or reasoned from common knowledge in the art, scientific principles, art recognized equivalents, or legal precedent. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In addition, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made,

and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this case, as detailed in previous section 8, using the LED of SOMMERS in the rearview mirror assembly of MISHIMAGI, would have flown naturally to one of ordinary skill in the art to simplify such rear view mirror assembly by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1 of MISHIMAGI).

22. In response to applicant's argument that combining MISHIMAGI and SOMMERS as proposed would require substantial structural modification of the patented structure of MISHIMAGI, the applicant is advised that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, as previously stated, using the LED of SOMMERS in the rearview mirror assembly of MISHIMAGI, would have flown naturally to one of ordinary skill in the art to simplify such rear view mirror assembly by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1 of MISHIMAGI).

23. Regarding the Examiner's rejection of Claim 14 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of YAN (U.S. Pat. 5,865,529), the applicant argues that the cited combination references fail to individually disclose, or even suggest when combined, all the features of the claimed invention, specifically MISHIMAGI not disclosing a reflection surface which allows light plane-radiated from the LED to be reflected. The applicant further argues that there is no motivation in the Prior Art to combine the cited references. The applicant even further argues that combining the cited references as proposed by the Examiner would require substantial structural modification of the patented structure of MISHIMAGI.

24. Regarding the Examiner's rejection of claims 15-23 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of YAN (U.S. Pat. 5,865,529), the applicant present no arguments, except stating that such claims depend directly or indirectly from independent Claim 14 and would be allowable when/if the independent claim is allowed.

25. In response to applicant's arguments regarding the rejections made over MISHIMAGI and YAN, the applicant is respectfully directed to sections 20-22, where such arguments were previously disclosed, as they as they apply to Claim 5.

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

27. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (571) 273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.



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